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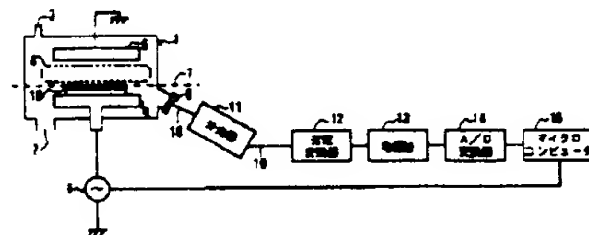
APPLICATION DATE : 15-12-97
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APPLICANT : RICOH CO LTD;

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TITLE : END POINT JUDGING METHOD OF
DRY ETCHING AND DRY ETCHING
EQUIPMENT



ABSTRACT : PROBLEM TO BE SOLVED: To judge the end point of dry etching without error, while avoiding time delays and deterioration of judging precision.

SOLUTION: In an etching treatment chamber 1 where dry etching is performed by using a plasma, a lighting window 9 is installed on the side opposite to a plasma region 8 with reference to the position 7 of a surface to be etched of a member 16 to be etched. A digital signal showing the luminous intensity of reaction product is obtained from a light introduced to the outside from the lighting window 9, by using a spectroscope 11, a photoelectric converter 12, an amplifier 13, and an A/D converter 14, and end point judgement of etching is performed on the basis of the signal, by using a microcomputer 15. In this equipment, a reflected light from the member 16 to be etched is not made to enter the lighting window 9, and fluctuations generated by interference of light due to the member 16 to be etched is not contained in the above signal.

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